

Quiz 7: Object Oriented Programming

EN.601.426/626 Principles of Programming Languages – SP26

Name: _____

In this quiz, we work with the F_bSR language, which extends F_b with records (R) and mutable state (S). We may use the following syntactic sugar `obj <- method` to represent the self-application call `obj.method(obj)`. You may also use `;` to separate multiple sequential expressions.

Please convert the following Python code into F_bSR:

```
class Point:
    def __init__(self, x, y):
        self.x = x
        self.y = y
    def move(self, dx, dy):
        self.x += dx
        self.y += dy
```

Your F_bSR object constructor for the `Point` class:

Based on the above class definition, write F_bSR code that is equivalent to the following Python code:

```
p = Point(1, 2)
p.move(3, 4)
```

Assume the above constructor is in the evaluation context. Your F_bSR code for the above two lines: